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INDIVIDUAL EXERCISES FOR LOWER
EXTREMITY AMPUTEES

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INDIVIDUAL EXERCISES FOR LOWER EXTREMITY AMPUTEES



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WASHINGTON, D. C.

WAR DEPARTMENT

WASHINGTON 25, D. C., 6 August 1946

War Department Pamphlet 8-10, Individual Exercises for Lower Extremity Amputees, is published for the information and guidance of all concerned.

[AG 461 (5 Jun 46)]

BY ORDER OF THE SECRETARY OF WAR:

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For explanation of distribution formula, see FM 21-6.

SPECIAL EXERCISES

for

Do only the exercises which are checked.

| 1A | 1B | 2 | 3 | 4 | 5 | 6 | 7A | 7B | 7C | 7D | 7E | 7F | 7G | 7H | 7I |
|----|----|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
| | | | | | | | | | | | | | | | |

Before anyone can be fitted with an artificial limb and learn to walk well with it, he has to strengthen his muscles and stand properly. Exercises will help do both. All of you don't have the same muscle weaknesses or the same postural faults, so you won't all be doing the same corrective exercises.

A few exercises have been chosen specifically for YOU. It's up to you to make the most of them. Doing these few exercises carefully and regularly each day will help overcome your muscle weakness more than a hard work-out in the gymnasium.

DO ONLY the exercises checked on page iii. Repeat them as many times as indicated below each exercise.

It's hard to "unlearn" bad walking habits. So start out right!



EXERCISE 1A

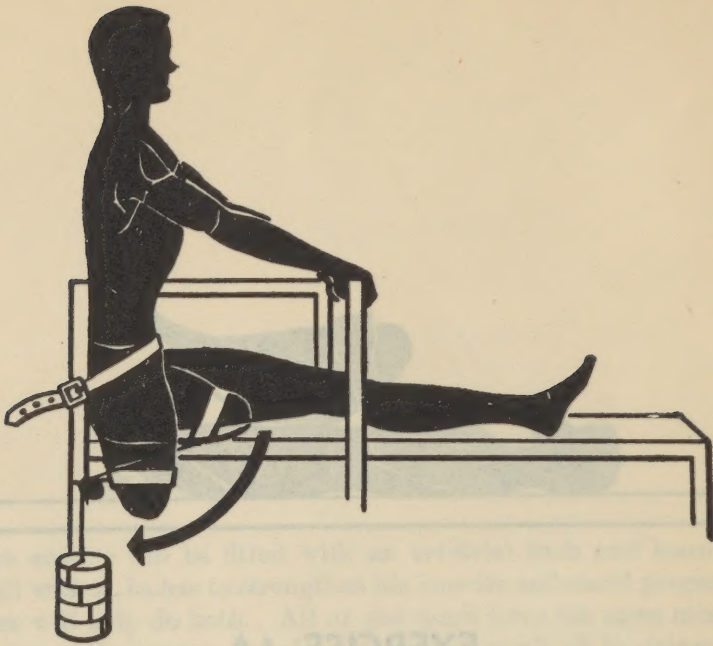
PURPOSE:

Active Stretching of Hip Flexor Muscles.

HOW TO DO THE EXERCISE:

Lie on back. Bend normal leg up on chest and hold this position with hands. Keep the lower portion of the back flat. Push stump down toward the table in the direction indicated by the arrow. Hold for a few seconds.

Do This Exercise times times daily.



EXERCISE 1B

PURPOSE:

Passive Stretching of Hip Flexor Muscles.

HOW TO DO THE EXERCISE:

Use special exercise frame. Sit comfortably with lower back flat against railing of frame. Keep the back flat by pulling in and up with the abdominal muscles (don't "lift" your chest) and by having the belt hold you back against the railing. Your good leg should be out in front of you at right angles to the body. Let the weights pull your stump back in the directions shown by the arrows. Just relax; let the weights do all the work.

Do This Exercise times times daily.



EXERCISE 2

PURPOSE:

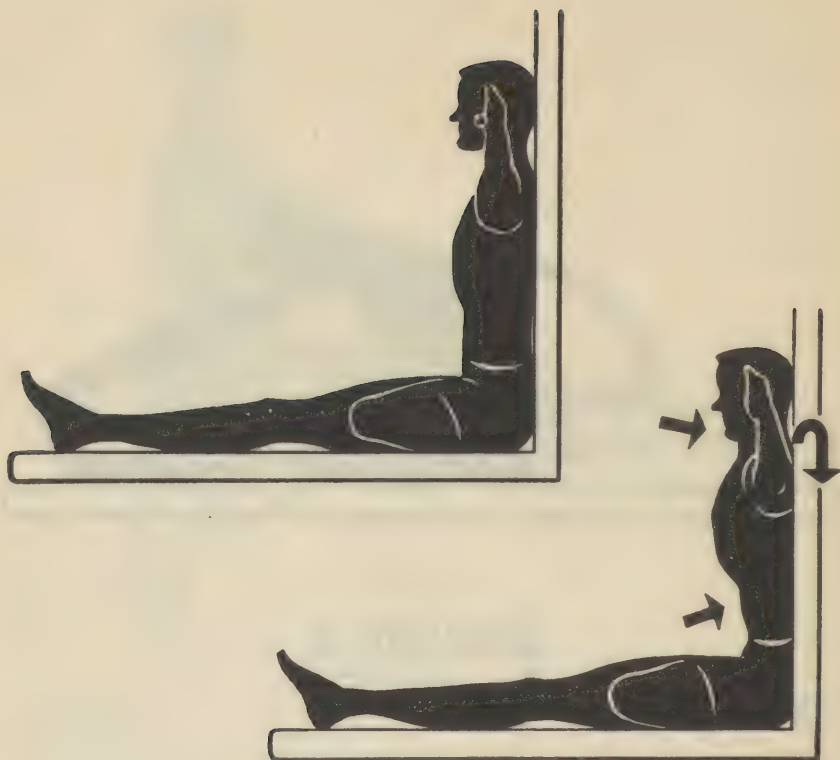
Stretching Low Back and Hamstring Muscles.

HOW TO DO THE EXERCISE:

At first, start from a sitting position. Keep your leg out straight. Stretch forward and touch your toes. Hold this position for a few seconds. Keep the back well rounded.

Later on, start from a position flat on your back. Stretch forward and touch your toes.

Do This Exercise times times daily.



EXERCISE 3

PURPOSE:

Stretching Pectoral (chest) Muscles.

Strengthening Muscles of Upper Back.

Correcting Tendency to Thrust Head Forward.

HOW TO DO THE EXERCISE:

Sit with the back flat up against the wall, if possible. Keep leg straight out in front of you and hands up beside (not behind) your head. Pull up and in with the abdominal muscles. Keep the back flat. Pull head back with the chin down and in. Pull the elbows back and up and back and down.

Do This Exercise times times daily.



EXERCISE 4

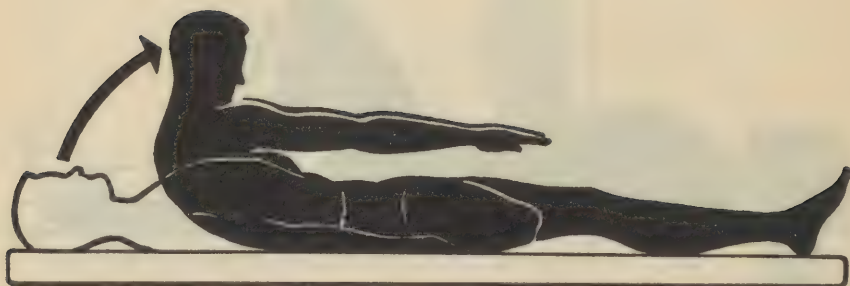
PURPOSE:

Strengthening Lower Abdominal Muscles.

HOW TO DO THE EXERCISE:

Lie flat on your back, with the hands up beside the head, and knee bent to the position shown. Push the lower back against the bed or table by pulling up and in with the abdominal muscles. Hold the back flat on the table and straighten the leg by sliding the heel down. Keep the back flat and return the knee to the original position. Keep stump flat on bed or table during this exercise.

Do This Exercise times times daily.



EXERCISE 5

PURPOSE:

Strengthening Upper Abdominal Muscles.

HOW TO DO THE EXERCISE

Lie flat on your back, arms down beside you, leg out straight. Push the lower back against the bed or table by pulling up and in with the abdominal muscles. Raise the head and shoulders up from the table. Do not try to come to a sitting position. Hold this position for a few seconds.

Do This Exercise times times daily.



EXERCISE 6

PURPOSE:

Strengthening Extensor Muscles of Hip.

HOW TO DO THE EXERCISE:

Use special exercise frame. Sit comfortably with lower back flat against railing of frame. Keep the back flat by pulling in and up with the abdominal muscles and by having the belt hold your back against the railing. Exercise with the weights by pulling the stump backward, but do not allow the back to arch meanwhile.

Do This Exercise times times daily.



EXERCISE 7A

PURPOSE:

Strengthening Normal Foot.

HOW TO DO THE EXERCISE:

Start in any position. Pull the foot inward and upward. Hold it in this position strongly for a few seconds. Relax. Repeat. DON'T describe a circle with the toes.

Do This Exercise times times daily.



EXERCISE 7B

PURPOSE:

Strengthening Normal Foot.

HOW TO DO THE EXERCISE:

Start in any position. Hold the foot up at right angles. Curl the toes down strongly. Hold this position for a few seconds. Relax. Repeat.

Be sure that the foot is kept at right angles to the leg at all times.

Do This Exercise times times daily.



EXERCISE 7C

PURPOSE:

Strengthening Quadriceps Muscle of Thigh of Normal Leg.

HOW TO DO THE EXERCISE:

Keep your leg completely straight. Pull the knee cap up by straightening the leg out a little more and by pushing the under side of the knee tightly against the sheet or top of table. Try to make the heavy quadriceps muscle stand out just as strongly as possible. Hold this position for a few seconds. Relax. Repeat.

Do This Exercise times times daily.



EXERCISE 7D

PURPOSE:

Increasing Range of Motion of Knee of Normal Leg.

Strengthening Quadriceps Muscle of Normal Leg.

Stretching Hamstring Muscles of Normal Leg.

HOW TO DO THE EXERCISE:

Lie on your back. Support the knee in a comfortably bent position by a pillow under it. Raise the lower leg to straighten the knee. Be sure to make the lower leg just as straight as possible. Hold this position for a few minutes. Relax. Repeat.

Note. Be sure that the thigh is not bent so much that you cannot completely straighten out the lower leg; you must be able to hold the leg completely straight.

Do This Exercise times times daily.



EXERCISE 7E

PURPOSE:

Strengthening Hip Muscles of Normal Leg.

HOW TO DO THE EXERCISE:

Lie on stump side. Keep the body and normal leg in a straight line. Raise the leg sideways as far as possible, pointing the toes toward the ceiling. Hold this position. Relax. Repeat.

Do This Exercise times times daily.



EXERCISE 7F

PURPOSE:

Strengthening Hip Muscles of Normal Leg.

HOW TO DO THE EXERCISE:

Lie flat on the abdomen. Raise the leg away from the table as far as you can without arching the back. Hold this position. Relax. Repeat.

Do This Exercise times times daily.



EXERCISE 7G

PURPOSE:

Improving Balance and Muscular Coordination.

HOW TO DO THE EXERCISE:

Practice balancing on the normal leg.

Check yourself every day by counting to see how much longer you can hold your balance.



EXERCISE 7H

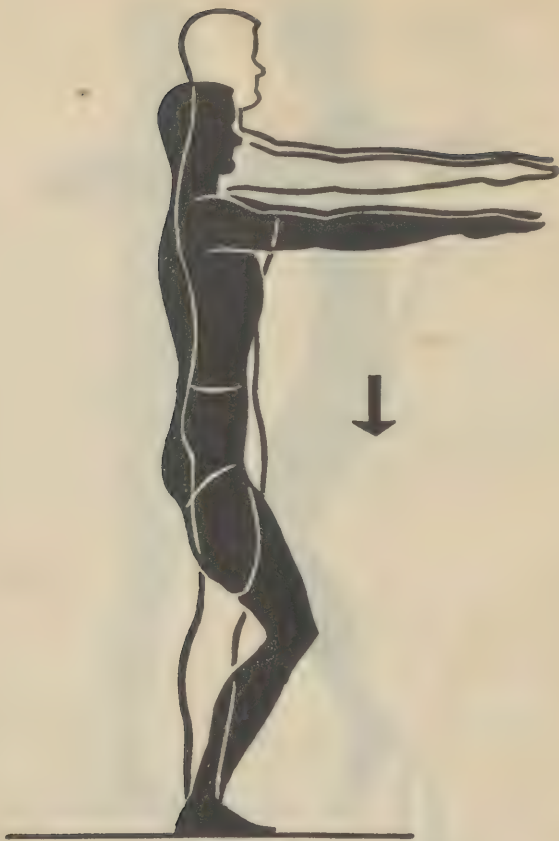
PURPOSE:

Improving Balance and Muscular Coordination.

HOW TO DO THE EXERCISE:

Hop on the normal leg.

Check yourself every day by counting to see how many more hops you can accomplish without losing your balance.



EXERCISE 7 I

PURPOSE:

Improving Balance, Muscular Strength, and Coordination.

HOW TO DO THE EXERCISE:

Do a deep knee bend. Hold your balance while lowering body. Return to upright position.

Check yourself every day by counting to see how many more deep knee bends you can accomplish without losing your balance.



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